

EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 2001026591
PUBLICATION DATE : 30-01-01

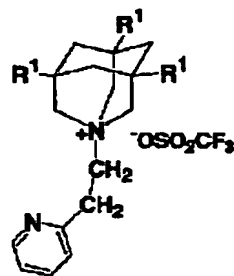
APPLICATION DATE : 09-07-99
APPLICATION NUMBER : 11196101

APPLICANT : AGENCY OF IND SCIENCE & TECHNOL;

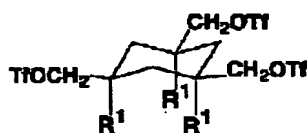
INVENTOR : FUTAMURA SHIN;

INT.CL. : C07D471/18

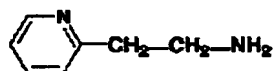
TITLE : AZONIAADAMANTANE COMPOUND,
PRODUCTION OF AZAADAMANTANE
COMPOUND FROM THE SAME AND
PRODUCTION OF THE
AZONIAADAMANTANE COMPOUND



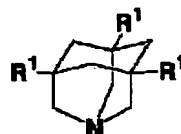
I



II



III



IV

ABSTRACT : PROBLEM TO BE SOLVED: To obtain an azoniaadamantane compound useful as an intermediate for synthesizing an azaadamantane compound by a few process safely and industrially advantageously.

SOLUTION: This azoniaadamantane compound is represented by formula I (R1 is an alkyl). The compound of formula I can be obtained by reacting a trifluoromethanesulfonic acid ester of formula II (OTf is trifluoromethanesulfonic acid group) with a primary amine compound of formula III. The compound of formula I is treated with an acid or a base to synthesize an azaadamantane compound of formula IV by one step. Consequently, the azaadamantane compound of formula IV expected to be useful for an antiarrhythmic agent, a medicine for cardiovascular disease, or the like, a solid electrolyte, a sensor, or the like, can be obtained by one step safely in a high yield. The compound of formula I is expectable for application to the above uses due to the similarity of structure.

COPYRIGHT: (C)2001,JPO